REMARKS

The applicants request that the examiner reconsider the application in the light of the foregoing amendments and the following remarks.

The Amendments

At the outset, it is noted that claims 36, 37, 39, 40, 42, 44, 47-52, and 56-60 have been amended to further clarify the inventive features and nature of the Applicant's claimed amusement ride assembly. Following is a brief summary of the amendments to the claims

1. Claims 36, 48, 56, and 57 have been amended to claim that the loop cable spans **"with a catenary"** between the end stations to provide the free-roll of a passenger carrier under gravity. Written support for that feature is found at page 6, lines 1-4 of the specification.
2. Claims 36, 48, 56, and 57 have been amended to claim to make clear that there is only one "**loop cable**" in the assembly and that this loop cable acts as both the support and retrieval cable.
3. Claims 36, 48, 56, and 57 have been amended to claim that the clamping mechanism is actuatable between a **closed position** in which it is clamped to the loop cable to fix the passenger carrier to the loop cable, and an **open position** in which the clamping mechanism is unclamped from the loop cable to allow the passenger to free-roll along the loop cable under gravity via the roller mechanism. Written support for that feature is found at page 9, lines 7-25 of the specification.
4. Claims 36, 48, 56, and 57 have been amended to claim that the electronic control system is in **signal communication** with the clamping mechanism and is **configured to send control signals** to actuate the clamping mechanism between the open and closed positions and to control rotation of the loop cable via the drive system to provide an amusement ride with a free rolling segment that provides an adrenaline rush.

It is also noted that new dependent claim 62, which recites additional details of the structure of the clamping mechanism, has been added. Written support for this claim is found on page 8, lines 11-29 of the specification. No new matter is added by any of the amendments.

In the June 10, 2010, Non-Final Action the Examiner rejected claims 36, 37, 39, 42, 44, 46-53 and 55-58 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Van Asch et al. (International Patent Publication No. WO 00/01455; hereinafter "Van Asch") in view of Feuz (US Patent No. 5,121,695).

Claim 40 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Van Asch in view of Feuz and Pearson (US Patent No. 4,003,314).

Claim 41 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Van Asch in view of Feuz and Nagel (US Patent No. 5,759, 107).

Claims 59-61 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Van Asch in view of Feuz and Booker (US Patent No. 3,854,554).

These rejections constitute all of the grounds set forth in the June 10, 2010, Non-Final Action for refusing the present application. For the reasons given below, it is respectfully submitted that these rejections should be withdrawn.

I. 35 USC § 103(a): Claims 36-37, 39, 42, 44, 46-53, and 55-58.

A. Claims 36, 56, and 57.

The Examiner rejected Claims 36-37, 39, 42, 44, 46-53, and 55-58 under 35 USC § 103(a) as being unpatentable over Van Asch in view of Feuz. However, neither Van Asch nor Feuz alone or together teach the combination of features of the Applicant's invention as recited in the amended independent claims 36, 48, 56, and 57.

The criterion for determining obviousness under 35 U.S.C. § 103(a) is whether the prior art supplies some motivation or incentive to one of ordinary skill in the art to arrive at the invention as claimed. *In re Dow Chemical Company*, 5 USPQ2d 1929 (Fed. Cir. 1988). Obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. *In re Fine*, 5 USPQ2d (Fed. Cir. 1988). Moreover, the teaching or suggestion supporting the desirability of the combination must be found in the prior art, not in Applicant's disclosure. *In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992). Under these standards, none of the cited references, considered singly or in combination, render obvious the invention as claimed in claims 36, 48, 56, and 57 in addition to claims which depend from the same.

The Examiner has made incorrect technical assertions about the teachings in Van Asch and therefore, the obviousness rejection of 36, 56, and 57 improper. Furthermore, even if Van Asch did teach what the Examiner is asserting, there would be no motivation to modify the Van Asch system with the teachings in Feuz to arrive at the Applicant's invention. Indeed, Feuz also fails to teach the features of the applicants' claimed apparatus that are missing from Van Asch.

Van Asch does not teach a passenger carrier that has a clamping mechanism and roller wheels that are rotatably engaged with a rotating **loop cable so as to enable free-rolling of the passenger carrier under gravity**, as claimed in independent claims 36, 56, and 57. The embodiments of the Van Asch apparatus relied on by the Examiner show a gondola or platform that is fixed or clamped to a rotatable loop cable at all times during operation of the apparatus described and shown in Van Asch.

On page 5 of the Official Action, the Examiner states:

> Van Asch teaches ... a rotatable endless loop cable (drive cable **15**), position [sic] between bull wheel **16** and guide bull wheel **17** (i.e. end stations) in figs 1 and 4. Upon cable 15 there is a passenger carrier (gondola **18** as seen in fig 3 and mobile platforms **23** and **24** in figs 4-5; see page 5 lines 6-10 where the mobile platforms are the same as the gondola) having roller wheels **19** rotatably engaged with the cable as best seen in fig 3...

The embodiment of Figures 1-3 of Van Asch discloses a bungy jumping apparatus spanning across between two hills 3, 4. There is a primary (**non-loop**) stationary cable 5 that extends between the two hills 3, 4 as shown in Figures 1 and 2, and a jumping platform 6 that is clamped in position on the primary cable 5, from which the bungy jumping is performed (see page 4, lines 8-10). Transport to the jumping platform 6 is provided by a mobile gondola 18 which is shown in Figure 3. In contrast to the Examiner's interpretation, the roller wheels 19 of the gondola 18 in Figure 3 are actually rotatably engaged with the primary (non-loop) cable 5. There is a rotatable drive loop cable 15, but this is **secured or fixed** to the support strut 20 of the gondola 18 at all times during operation of the Van Asch apparatus. (See page 4, lines 24-26). Therefore the gondola 18 is not rotatably engaged for free-rolling on a loop cable. Rather, it is clamped or fixed to the rotatable drive cable 15 at all times. The drive loop cable 15 assists in moving the gondola 18 upon the primary non-loop stationary cable 5.

Similarly, the second embodiment of Van Asch in Figures 4 and 5 does not disclose a passenger carrier having roller wheels that are rotatably engaged with a rotatable loop cable and which is adapted for free-rolling between end stations. In this embodiment of Van Asch, mobile jumping platforms 23 and 24 are provided rather than a fixed jump platform (6) and a mobile gondola (18) for transporting the jumpers to the jump platform like in the first embodiment. Referring to Figures 4 and 5 and lines 11-12 on page 5, the mobile jumping platforms 23, 24 are **clamped** to the rotatable drive loop cable 15 and move with that cable. They are not supported from the drive cable 15 by rotatably engaged roller wheels for free-rolling along the drive loop cable 15 under gravity. Therefore, Van Asch does not render obvious a passenger carrier having a roller mechanism with roller wheels that are rotatably engaged with a loop cable.

Furthermore, the Examiner concedes that Van Asch does not disclose or suggest a clamping mechanism and an electronic control system as claimed by the applicants.

For all of the foregoing reasons, Van Asch does not provide substantial evidence of obviousness for any of the features of the Applicant's amusement ride assembly ride invention as set forth in the amended independent claims.

The Examiner goes on to state at page 5: "...Feuz teaches a ride assembly overhead cableway known to be used in ski resorts/parks, having rotatable endless loop cable **2** between stations, passenger carrier (seat **50**, see figs 1-3), and clamping mechanism (construed as clamp **52**, having jaws **54**, **56** which are connected by bolt **58** with a support shaft **62** as seen in fig 3 and discussed in column 4 lines 20-50)."

Feuz shows and describes a conventional chairlift system, having an inclined loop cable extending between upper and lower stations, for example on a ski field. It does not render obvious a loop cable "spanning **with a catenary** between end stations", like in the Applicant's claimed amusement ride which provides a gravity-driven free-roll ride over a valley.

In contrast to the Applicant's claimed invention, the clamp (52) used in the chairlift apparatus of Feuz is mechanically opened and closed by engagement of activation rollers (66) with uncoupling in transfer rails (24 and 26) only at loading/unloading station of the chair lift (see columns 4, lines 23-43, and column 5, lines 50-60.) The clamp (52) in Feuz is not in signal communication with an electronic control system which controls its movement between an open and closed position, like in the Applicant's invention. Indeed there is no motivation to do this in Feuz because the chairs on the cable are only ever unclamped and detached from the loop cable (2) at the end stations for unloading and loading of passengers.

The Applicant's claimed amusement ride assembly includes a passenger carrier that is adapted to free-roll under gravity along the loop cable, preferably from an end station to an intermediate point on the loop cable, by virtue of the catenary, between the end stations after opening of the clamping mechanism, and then subsequent remote closing of the clamping mechanism is required to fix a passenger carrier to the loop cable such that it may be retrieved to an end station via rotation of the loop cable.

In addressing the electronic control system used in the applicants' claimed amusement ride the Examiner states: "Also, Feuz teaches in column 1, lines 1-47 and in column 3, lines 8-

42 that the movement of cable **2** is a movement in a certain rpm movement (it is understood that this movement of the cable is caused by the drive system which is operated automatically, i.e. via the electronic control system)."

Nowhere in the cited portions of Feuz does Feuz teach an electronic control system that is in signal communication with a clamping mechanism of the chair for controlling the opening and closing of the clamping mechanism and coordinated rotation of the loop cable via control of the drive system as recited in the amended independent claims.

On page 4 of the official action the Examiner concludes:

> It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide Van Asch with an electronic control system as taught by Feuz for the reason that a skilled artisan would have been motivated to use a known technique (Feuz's electronic control system with a ski-lift) to improve similar devices (Van Asch's amusement ride) to obtain the predictable results of using a well known component (i.e. an electronic control system) to monitor and control the movement of a passenger carrier upon a rotatable cable.

The Examiner's conclusion is incorrect because there is no electronic control system disclosed in Feuz that is in signal communication with the clamping mechanism and which is configured to control the opening and closing of the clamp for allowing the chairs (50) to freely roll along the cable between the end stations.

As submitted above, Van Asch and Feuz fail to render obvious either singly or in combination the technical features of the Applicant's invention as recited in the amended independent claims.

Furthermore, even if one or more of the features of the Applicant's invention were described in either of Van Asch or Feuz, there would be no motivation to combine these teachings. They relate to different systems, with different objectives. Van Asch is directed toward a bungy jumping apparatus. The embodiments in Van Asch relied on by the examiner disclose a complex system of primary and secondary drive cables for transporting a jumping

platform to a position between hills so that the bungy jumper may then jump from the platform. The Applicant's claimed amusement ride is not a transport system, but rather an amusement ride that provides a free-roll ride under the force of gravity. Also, the Applicant's claimed amusement ride achieves its free-roll ride with a single rotatable loop cable that spans over a valley. The claimed amusement ride has a novel configuration that enables the loop cable to act as both the free-roll ride cable, and the retrieval cable (via its rotation). That arrangement provides significant cost and efficiency advantages relative to multiple cable systems like the ones described in Van Asch.

At page 6 of the official action, the examiner states that the modified Van Asch structure would be capable of performing the functions of the applicants' claimed apparatus. It thus appears that the examiner is relying on a theory of inherency. However, the examiner is reminded that the basis of the rejection is not anticipation, but rather obviousness based on a combination of references. There is nothing in either of the cited references that would suggest the combination of features of either the applicants' claimed amusement ride or the functions performed by the claimed amusement ride. Therefore, the examiner's assertions about the "modified Van Asch structure" are completely fictitious. It is well settled law that inherency of an advantage or function and its obviousness are entirely separate questions. That which may be inherent is not necessarily known and obviousness cannot be based on what is unknown. *In re Spormann and Heinke*, 150 USPQ 449, 452 (C.C.P.A. 1966). *Accord, In re Adams*, 148 USPQ 742 (C.C.P.A. 1966).

For all of the foregoing reasons, it should now be clear that the proposed combination of references would not result in an apparatus having all of the features of the applicants' claimed amusement ride. Therefore, the rejection of independent claims 36, 56, and 57 under 35 U.S.C. 103(a) should be withdrawn.

Claims 37, 39 – 42, 44, 46, 47, 52, 53, 55, and 58 – 61 depend from claim 36 either directly or indirectly and thus, include all of the features of claim 36. Therefore, claims 37, 39 –

42, 44, 46, 47, 52, 53, 55, and 58 – 61 are allowable over the cited references for at least the same reasons as claim 36.

B. Claims 48 to 51.

The examiner rejected claims 48 to 51 under 35 USC 103(a) as being unpatentable over Van Asch in view of Feuz. In making this rejection the examiner stated, in pertinent part:

> As discussed above the modified Van Asch [sic] would have had a clamp mechanism and an electronic control system (as taught by Feuz) and while wheels 19 are unclamped, the passenger carrier (gondola 18 or platforms 23 and 24) would have free roll along cable 15 due to gravitational forces. The carrier is traveling in the same direction s the rotating loop (i.e. in the same direction of the free-roll while wheels 19 are unclamped.
>
> With respect to the timing of clamping the carrier (using the electronic control system) to the cable (below the cable speed or as the same speed, as recited in claims 49 and 51), it would have been obvious to clamp the carrier to the cable while the carrier [is] at these particular speeds as a design choice or user preference's as a matter of safety issues concerning passengers.

The rejection of independent claim 48 is moot in view of the Applicant's amendment and for at least the same reasons as claims 36, 56, and 57. As in the rejections of claims 36, 56, and 57, the examiner's basis for rejection is a fictitious combination of selected features of the Van Asch and Feuz patents and a completely fictional assumption of how the proposed combination might operate. However, neither Van Asch nor Feuz suggest the combination of features and steps of providing an amusement ride using the Applicant's amusement ride assembly as set forth in amended method claim 48. In the absence of any teaching or suggestion in either of the cited references for a method of operating an amusement ride as set forth in claim 48, this rejection is not supported by substantial evidence of unpatentability. For all of the foregoing reasons, the rejection of claim 48 should be withdrawn.

Claims 49 – 51 depend from claim 48 either directly or indirectly and thus, include all of the features of claim 36. Therefore, claims 49 – 51 are allowable over the cited references for at least the same reasons as claim 48.

CONCLUSION

In view of the foregoing amendments and remarks, it is believed that the claims pending in this application are in condition for allowance. The Applicants respectfully request that the Examiner reconsider and withdraw the rejections of the claims. Early and favorable action on the present application is earnestly solicited.

Respectfully submitted,

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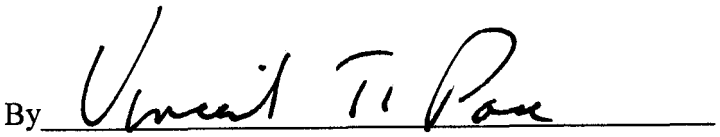
By 
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